# 58th IHC ACTION ITEMS

1. Title: **Adding GPS Dropwindsonde Splash Time Information**

   Submitter: NOAA

   Discussion: The TEMP DROP format (FM-37X), reference NHOP, Figure G-4, for the GPS dropwindsonde currently only includes one value for time: the launch time. For accurate, time sensitive plotting of the GPS dropwindsonde winds near and at the surface and particularly for sondes launched from high altitudes, the addition of splash time to the TEMP DROP message would be informative.

   Recommendation: Amend the NHOP to add the GPS dropwindsonde splash time to the TEMP DROP 62626 section. Place splash time "hhmm" directly after the splash location. Aircraft Operations Center (AOC) will notify NCAR.

   Abbreviated example with splash time in bold:

   UZNT13 KNHC 061851
   62626 MXWNDBND SPL 2525N07835W **1832** LST WND 012
   MBL WND 13065 AEV 20200 DLM WND 13075 990699 WL150
   13070 843

   Action: **Amend the NHOP per recommendation.**

2. Title: **Changes to NWS TCU and TCE Product Types (Information Item)**

Submitter: NOAA

Discussion: NWS tropical cyclone forecast centers issue Tropical Cyclone Updates (TCUs) and Tropical Cyclone Position Estimates (TCEs) as warranted. One TCU product is available in each basin, and applies to any tropical cyclone there. The same is true of the TCE. Product users (1) don't have a numeric way of identifying the particular storm from the product; (2) don't have a numeric way to distinguish between TCUs (or between TCEs) for a given storm except for the date/time stamp (products can "overwrite" each other; e.g., on TPC's webpage); (3) may not be as aware of the products because they aren't part of the advisory nomenclature they more commonly see.

TCU and TCE product header information will be expanded to associate these products with the particular tropical cyclone they describe. Added will be MIATCUATx, MIATCEATx, MIATCUEPx, MIATCEEPx, where x varies from 1-5 along with the associated tropical cyclone. In addition, each TCU and TCE will be numbered for a given tropical cyclone consecutively starting with 1. (Note, the TCU, TCE and advisory numbers will only match coincidentally. For example, MIATCUAT2 Update Number 3 might occur after MIATCPAT2 Advisory Number 27 and MIATCEAT2 Position Estimate Number 11.)

Example of proposed header formats:

WTNT 61 KNHC DDHHMM (no change)
TCUATx
BULLETIN (no change)
HURRICANE ISABEL TROPICAL CYCLONE UPDATE NUMBER 2
NWS TPC/NATIONAL HURRICANE CENTER MIAMI FL (no change)
1110 AM EDT THU SEP 18 2003 (no change)

WTNT 51 KNHC DDHHMM (no change)
TCEATx
BULLETIN (no change)
HURRICANE ISABEL POSITION ESTIMATE UPDATE NUMBER 5
NWS TPC/NATIONAL HURRICANE CENTER MIAMI FL (no change)
12 PM EDT THU SEP 18 2003 (no change)

Recommendation: Forwarded as informational item to IHC and RA-IV. Changes not effective until May 15, 2005.

Action: **No action required for 2004 NHOP.**

3. Title: **Changes to the NHOP regarding Deployment of Drifting Buoys**

Submitter: NOAA

Discussion: NHOP, Section 8.2, page 8-2, Requests for Drifting Buoy Deployment, Section 8.2.2 states "DOC may request the deployment of up to 4 drifting buoys between 100 and 180 nautical miles (nm) from the storm center,.....". Technology has changed dramatically since that was written, and was referring to the TOGA or WSD type of buoy, which was a large and expensive platform. Only four could fit into a WC-130H aircraft. However technology has evolved and we can now deploy dozens of buoys from a single WC-130 aircraft flight. Last year the 53rd deployed 22 buoy and float platforms on a single flight approximately 200 nm ahead of Fabian for the CBLAST project. With the improvement in forecast track accuracy since 8.2.2 was written, we can deploy the platforms further ahead of the storm center at the same risk level. Next year we plan on two such flights. So for the future, when such flights become operational, we would now like the wording in 8.2.2 modified to reflect technology changes and forecast improvements.

Recommendation: Suggest the following changes to NHOP

1. Wording of 8.2.2 changed to the following: "DOC may request the deployment of a drifting buoy and subsurface float array with up to 40 elements at a distance of 200 to 400 nm from the storm center, ....".

2. ONR is supporting a training program at the 53rd to maintain buoy deployment proficiency of the Drop Sonde Operators (DSO's) for this type of mission. Therefore, under the bullets in paragraph 8.2.2, suggest add one more bullet at the end which says: "Availability of aircraft and DSO's certified for buoy deployment"

3. Replace Fig. 8-5 (page 8-9) with an updated version, such as Fig 1a (page 13) from the 2003 Hurricane Field Program Plan.

Action: **Amend the NHOP per recommendation.**

4. Title: **Retirement of Storm Names**

Submitter: NOAA

Discussion: Fabian, Isabel and Juan will be retired. Replacement names to be decided at WMO RA-IV meeting.

Lili, in 2002, was nominated to be retired. The replacement name, Laura, was selected at the RA-IV meeting. It was later determined, Laura had been retired. By then, it was too late to select another name, so Lili was carried in the 2008 names. Lili though needs to be replaced.

Recommendation: Amend NHOP when replacement names for Fabian, Isabel, Juan and Lili are received from NWS.

Action: **Forward to RA-IV meeting for action and then amend NHOP with replacement names once received.**

5. Title: **Increase the Run Frequency and Extend the Forecast Period of GFDN**

Discussion: In 2003, the NOAA/National Hurricane Center extended the forecast period of its tropical cyclone forecasts issued every 6 hours from 3 to 5 days, principally in response to a requirement from the DOD. TPC would make greater use of the DOD's GFDN hurricane model and potentially make better forecasts if that model were run every 6 hours out to 126 hours. The GFDN is currently run only at 6 and 18Z, and then out only to 84 hours.

Recommendation: Ask the Navy to run the GFDN at 0, 6, 12, and 18Z out to 126 hours.

Action: **FNMOC will increase the run frequency and extend the forecast period of the GFDN, resources permitting.**

6. Title: **53 WRS NHOP Changes**

Discussion: The following are recommended NHOP changes:

- Page 5-6, Table 5-1, "Fix Pattern"row. Delete "AOC may report limited data on intermediate fixes." *Reason: Both AOC and USAFR always report complete VDMs.*
- Page 5-6, para. 5.5.1.2. Delete the words "Figure 5-6," from the first sentence. *Reason: Erroneous reference.*
- Page 5-8, Figure 5-4, Item P. Insert the word "BELOW" before 1500 FT in the 2nd remark. *Reason: Corrects omission.*
- Page 5-8, Figure 5-4, INSTRUCTIONS. In the second sentence, add a period after "available" and delete the rest of the sentence. *Reason: AOC and USAFR always transmit complete vortex messages.*
- Page 5-20, para. 5.7.1. Delete the word "scheduled" from the first sentence. Delete the entire second sentence. *Reason: AOC and USAFR will always transmit complete vortex messages.*
- Page 5-23, para. 5.7.7. Add the following sentences at the beginning of the paragraph. "Air Force aircraft movement information (i.e., departure time, and location and ETA's to locations) will not be included in observation remarks. That information should be passed to CARCAH via SATCOM administrative messages." *Reason: Provides guidance to crews on how to pass aircraft movement information.*
- Page 5-23, para. 5.7.7, EXAMPLE. Delete the space between WX WXA. Should read "AF987 WXWXA.

Recommendation: Amend the 2004 NHOP to include approved recommended changes.

Action: **Changes approved; amend the NHOP as needed.**